

REPORT ON THE TEN-YEAR REVIEW OF SOLID WASTE MANAGEMENT PERMITS

Virginia Department of Environmental Quality

Revised August 2001

REPORT ON THE TEN-YEAR REVIEW OF SOLID WASTE MANAGEMENT PERMITS – REVISED AUGUST 2001

EXECUTIVE SUMMARY

Under the Virginia Waste Management Act and the Solid Waste Management Regulations, at least once every ten years, the Director must review and issue written findings on the environmental compliance history of each permittee, material changes, if any, in key personnel, and technical limitations, standards, or regulations on which the original permit was based. The reviews are to be undertaken in accordance with time periods established by regulation of the Virginia Waste Management Board for different categories of permits.

This report presents the results of a review of all active solid waste management facility permits issued prior to July 1, 1991, as required by statute and regulation. Ninety-seven (97) permits issued prior to that date are still active and have been reviewed for this report.

The review included both an environmental compliance history review and a technical review. The environmental compliance history review consisted of a compilation of the past ten years of inspection records. The findings include the number of inspections conducted each year and the number of alleged violations. The requirements for disclosure statements, including changes to key personnel, were among the criteria examined in the environmental compliance history review. The technical review compared the contents of the existing, individual permits to the contents now required for issuance of a permit. Over the years, the permitting standards have been changed by statute, and by amendments to the governing regulations in December 1988, March 1993, and May 2001. The findings of the technical review identify the components, or modules, that are required in current permits but that have not been included in the existing, individual permits.

By statute, if the Director finds repeated material or substantial violations of the permittee or material changes in the permittee's key personnel that would make continued operation of the facility not in the best interest of human health or the environment, the Director shall amend or revoke the permit. Also, the Director may amend the permit to include additional limitations, standards or conditions when the underlying standards have been changed by statute or regulation, or as otherwise provided by law.

The environmental compliance history review shows that as the number of inspections conducted each year has increased since 1991, the average number of alleged violations per inspection has decreased, although some facilities have more instances of alleged violations than others do.

The technical findings indicate that fifty (50) facilities have permits that were issued prior to December 21, 1988, and are without any of the components, or modules, required in current permits. Although these facilities lack current, facility-specific permit modules, they remain subject to their existing permits, any approved plans, and the standards in the applicable regulations.

The Director is soliciting comments on the report and findings from facilities that are subject to the review prior to establishing a schedule for initiating permit amendments under this authority. Comments from the public will also be accepted. The comment period closes at 5:00 p.m. on October 5, 2001.

Any permit amendment will take place in accordance with the Virginia Waste Management Act and the Virginia Administrative Process Act.

The Director retains authority to revoke, amend, or suspend permits in accordance with applicable laws and regulations. The Director also retains authority to address violations of statutory, regulatory, or permit requirements by order or other remedy, including immediate action as necessary, in appropriate circumstances.

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AUTHORITY AND BACKGROUND

This *Report on the Ten-Year Review of Solid Waste Management Permits* is issued pursuant to Virginia statutory and regulatory requirements.

The Virginia Waste Management Act, at Va. Code ' 10.1-1408.1.E, requires the Director of the Department of Environmental Quality (Director and Department, respectively) to review and issue written findings on specific aspects of permitted solid waste management facilities at least once every ten years. The reviews are to be undertaken in accordance with time periods established by regulation of the Virginia Waste Management Board for different categories of permits. The pertinent part of Va. Code ' 10.1-1408.1.E states as follows:

At least once every ten years, the Director shall review and issue written findings on the environmental compliance history of each permittee, material changes, if any, in key personnel¹, and technical limitations, standards, or regulations on which the original permit was based. The time period for review of each category of permits shall be established by Board regulation.

The same section of the Code addresses amendment or revocation of solid waste management permits based on the required review and findings:

If, upon such review, the Director finds that repeated material or substantial violations of the permittee or material changes in the permittee's key personnel would make continued operation of the facility not in the best interests of human health or the environment, the Director shall amend or revoke the permit, in accordance herewith. Whenever such review is undertaken, the Director may amend the permit to include additional limitations, standards, or conditions when the technical limitations, standards, or regulations on which the original permit was based have been changed by statute or amended by regulation or when any of the conditions in subsection B of § 10.1-1409 exist. The Director may deny, revoke, or suspend any permit for any of the grounds listed under subsection A of § 10.1-1409.

¹ "Key personnel" means the permit applicant and any person employed by the applicant in a managerial capacity, or empowered to make discretionary decisions, with respect to the solid waste operations. See Va. Code §10.1-1400.

The Virginia Waste Management Board established by regulation that the first review of permits would address facilities in existence prior to July 1, 1991.² Ninety-seven (97) active solid waste management facilities with permits issued before July 1, 1991, have been reviewed for this report.

In accordance with the statute, the review included both an environmental compliance history review and a technical review of the permit.

ENVIRONMENTAL COMPLIANCE HISTORY REVIEW

The environmental compliance history review consisted of a compilation of information from the Department's inspection records. The information included the number of inspections conducted each year and the number of alleged violations. The requirements for disclosure statements, including changes to key personnel, were among the criteria examined in this review.

Staff from the Department's regional offices conducted environmental compliance history reviews for the facilities located in their region. Staff examined all available inspection records dating back to July 1, 1991. This date was chosen because the law requiring the reviews was not in effect prior to 1991 and because compliance history from more than ten years ago would be of marginal relevance in evaluating a facility and its operators in 2001.

From this review, a simple tabulation was made of the number of inspections conducted and the number of alleged violations recorded. For consistency, worksheets were developed for conducting the reviews. The same worksheet was used for all landfills, because the regulatory criteria for landfills are similar, whether the landfill is for disposal of sanitary, industrial, or construction/demolition/debris waste. Non-landfill facilities were considered separately because of differences in regulatory criteria and because these facilities do not permanently retain waste on-site.

TECHNICAL REVIEW

The technical review compared the contents of the existing, individual permits for the facilities to the contents now required for issuance of a permit. Over the years, the permitting standards have been changed by statute, and by amendments to the governing regulations in December 1988, March 1993, and May 2001.

Staff from the Department's central office conducted the technical reviews. In particular, each of the 97 permits was reviewed to ascertain whether it contains the documentation required in a current solid waste management facility permit, as specified

² Virginia Solid Waste Management Regulations (VSWMR), 9 Virginia Administrative Code (VAC) 20-80-100.C.

in Part VII of the Virginia Solid Waste Management Regulations (VSWMR),³ including requirements of the Virginia Waste Management Act. The standards of VSWMR address the design, construction, operation, monitoring, closure, and post-closure maintenance for landfills and other solid waste management facilities, as necessary. Applicable permit elements, or modules, or portions of such modules, that are not included in existing, individual permits issued prior to July 1, 1991, were identified during the review.

As before, for consistency, a worksheet was developed for conducting the reviews. A separate worksheet was completed for each facility to document the content of the permit compared to current requirements.

FINDINGS

The findings of the Ten-Year Permit Review are the product of the environmental compliance history review and the technical review. The written findings for individual facilities are contained in Appendices 1 through 4, as described below. Summary information is provided in Tables 1 through 5.

The findings of the environmental compliance history reviews for landfills are provided in Appendix 1, which contains a Compliance Review Worksheet for each landfill subject to this report. The findings of the environmental compliance history reviews for non-landfills are provided in Appendix 2, which contains a Compliance Review Worksheet for each non-landfill facility subject to this report. The compliance criteria are listed in the first column of each worksheet. The number of inspections conducted at the facility by year is provided in the first two rows of each worksheet. The number of times an alleged violation was cited in the inspection reports for a particular year is displayed in the cell corresponding to the criteria and year. Each worksheet also presents the average number of alleged violations per inspection.

A summary of the environmental compliance history review for all landfills is included as Table 1. It lists the number of inspections, the number of alleged violations, and the average number of alleged violations per inspection for all landfills subject to this report. The same information for non-landfill facilities is listed in Table 2. These tables show that as the number of inspections conducted each year has increased since 1991, the average number of alleged violations per inspection has decreased. Table 3 shows the total alleged violations and the total alleged violations per inspection for individual landfills. Table 4 shows the same information for non-landfills. These tables show that some facilities have more instances of alleged violations than others do.

The findings of the technical reviews for landfills are provided in Appendix 3, which contains a Permit Review Checklist for each landfill subject to this report. The first part of the worksheet contains information on the landfill, the reviewer, and a history of permitting activities (amendments and variances) for the facility. It also contains a summary of the comparison of the existing permit to the current regulatory requirements.

³ 9 VAC 20-80-10, et seq.

The remainder of the worksheet for each facility details the current requirement, whether that requirement is found in the existing permit, the source of the requirement, and comments. The findings of the technical reviews for non-landfills are provided in Appendix 4, which contains Permit Review Checklists for non-landfills.

Permits that were issued prior to the December 21, 1988 VSWMR and have not been amended do not contain any of the components, or modules, currently required for permit issuance.⁴ At a minimum, the pre-1988 permits require the following components to be consistent with current VSWMR: an Operations Plan (including attachments such as a Gas Management Plan and an Emergency Contingency Plan); a Groundwater Monitoring Plan; and a Closure and Post-Closure Plan.

The technical findings indicate that fifty (50) facilities were issued permits prior to December 21, 1988, that have not been amended. A list of these facilities is included as Table 5. Although these facilities lack current, facility-specific permit modules, they remain subject to their existing permits, any approved plans, and the standards in the applicable regulations.

Permits that were issued between 1988 and 1991 (that have not been amended) generally incorporate the required standards by reference; however, those elements would not be identical with those for a current permit.

AMENDMENT OR REVOCATION OF PERMITS

As noted, under the governing statute, if the Director finds repeated material or substantial violations of the permittee or material changes in the permittee's key personnel that would make continued operation of the facility not in the best interest of human health or the environment, the Director shall amend or revoke the permit. Also, the Director may amend the permit to include additional limitations, standards or conditions when the underlying standards have been changed by statute or regulation, or as otherwise provided by law. Any permit amendment is subject to the requirements of the Virginia Waste Management Act, Va. Code § 10.1-1400, et seq., and Administrative Process Act, Va. Code § 9-6.14:1, et seq.

The Director is soliciting comments on the report and findings from facilities that are subject to the review prior to establishing a schedule for initiating permit amendments under this authority.

The Director retains authority to revoke, amend, or suspend permits in accordance with applicable laws and regulations. The Director also retains authority to address violations of statutory, regulatory or permit requirements by order or other remedy, including immediate action as necessary, in appropriate circumstances.

⁴ The difference in the permitting standards between the March 1993 VSWMR and the May 2001 VSWMR are not significant for purposes of this report.

COMMENT PROCEDURE

As noted, the Director is soliciting comments on the report and findings from facilities that are subject to the review prior to establishing a schedule for initiating permit amendments under this authority. Copies of this report are being mailed individually to each of the facilities that are subject to the review. Comments from the public will also be accepted. The comment period closes at 5:00 p.m. on October 5, 2001.

Table 1 - Total Alleged Violations
Landfills (Sanitary Landfills, CDD Landfills, & Industrial Landfills)

YEAR	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
Number of Inspections	83	109	162	266	244	280	328	299	450	595	2816
Alleged Violations	121	333	366	415	362	407	348	206	332	397	3287
Average Alleged Violations	1.46	3.06	2.26	1.56	1.48	1.45	1.06	0.69	0.74	0.67	1.17

AVERAGE ALLEGED VIOLATIONS PER INSPECTION: 1.17

Table 2 - Total Alleged Violations
Non-Landfills (Transfer Stations, Energy Recovery Facilities, and Gas Extraction Systems)

YEAR	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total
Number of Inspections	13	7	35	48	62	62	66	79	99	52	523
Alleged Violations	6	0	21	14	7	14	7	8	9	9	95
Average Alleged Violations	0.46	0.00	0.60	0.29	0.11	0.23	0.11	0.10	0.09	0.17	0.18

AVERAGE ALLEGED VIOLATIONS PER INSPECTION: 0.18

Table 3 - Individual Facilities Alleged Violations
Landfills (Sanitary Landfills, CDD Landfills, & Industrial Landfills)

Site Name	DEQ Region	Total Alleged Violations	Average Alleged Violations
			Per Inspection
001 Loudoun Co. LF	NRO	18	0.55
014 Mecklenburg Co. LF	PRO	45	1.22
021 Augusta Co. Service Authority LF	VRO	29	1.38
023 Scott County Sanitary Landfill	SWRO	58	0.88
029 Prince William County Sanitary LF	NRO	71	1.97
031 South Boston Sanitary LF	PRO	52	1.37
041 City of Portsmouth / Craney Island LF	TRO	32	0.73
049 City of Martinsville LF	WCRO	71	1.69
062 Rockingham Co. LF	VRO	80	3.20
065 First Piedmont Corp. LF	WCRO	11	0.35
072 Franklin Co. LF	WCRO	110	2.62
074 Stafford Co. LF / R-Board LF	NRO	40	1.38
075 Rockbridge Co. LF / Buena Vista	VRO	116	3.87
086 Appomattox Co. LF	WCRO	73	1.74
090 Orange Co. LF	NRO	101	3.06
091 Accomack Co. LF / Bobtown South	TRO	101	2.46
092 Halifax Co. LF	PRO	86	2.00
103 I-95 LF	NRO	4	0.14
125 Ivy Sanitary LF	VRO	59	1.79
149 Fauquier Co. LF	NRO	19	0.59
182 Caroline Co. LF	NRO	39	1.30
187 Waynesboro Nurseries, Inc.	VRO	13	1.30
194 Louisa Co. LF	VRO	74	3.52
204 City of Waynesboro LF	VRO	80	2.86
207 Hoechst-Celanese Fibers LF	WCRO	24	0.52
222 Appalachian Power LF / Glyn Lyn	WCRO	4	0.09
223 Appalachian Power LF / Clinch River	SWRO	10	0.25
227 Lunenburg Co. LF	PRO	60	1.54
228 Petersburg City LF	PRO	34	0.85
235 Cox's Charles City Road LF	PRO	9	0.36
270 Taylor Road LF	PRO	8	0.35
280 Holland Industrial LF	TRO	41	1.24
285 Cambell Co. LF	WCRO	50	1.28
304 Nottoway Co. LF	PRO	89	1.98
305 Thrasher CDD Landfill (Elbow Farms)	TRO	62	1.27
307 U.S. Gypsum Company LF- Washington County	SWRO	25	0.68
314 Hanover Co. LF	PRO	49	1.17
322 Waltrip LF	TRO	41	1.00
326 Hilltop Debris LF	NRO	4	0.21

		DEQ	Total Alleged	Average Alleged
	Site Name	Region	Violations	Violations Per Inspection
327	Rainwater Concrete Debris LF	NRO	25	1.19
331	Lorton CDD Landfill	NRO	15	0.75
346	Georgia Pacific Corp. North -Jarratt	PRO	18	0.86
353	Radford Army Ammunition Plant Ash LF #2	WCRO	6	0.16
363	Amoco LF / Yorktown Refinery	TRO	23	0.53
377	Shoosmith Debris LF	PRO	4	1.33
394	Westvaco Fly Ash LF #3	WCRO	15	0.41
397	Montgomery Regional Solid Waste Authority - Mid-County Landfill	WCRO	93	1.94
398	City of Virginia Beach LF #2	TRO	31	0.69
405	Greenville Co. LF	PRO	26	0.63
413	Westvaco Fly Ash LF #1	WCRO	10	0.27
414	Westvaco Fly Ash LF #2	WCRO	7	0.19
417	SPSA Regional LF	TRO	49	0.75
429	Fluvanna Co. LF	VRO	101	3.74
433	Radford Army Ammunition Plant Debris Landfill No. 2	WCRO	3	0.09
436	Wolftrap Debris LF	TRO	39	0.83
440	VA Power Ash LF- Chesapeake	TRO	28	0.78
441	Potomac LF	NRO	53	2.04
445	Thomas Brothers Debris LF	WCRO	58	1.93
451	Indian Trail Disposal Facility	TRO	35	0.92
456	Lynchburg Foundry LF / Lynchburg	WCRO	18	0.62
457	Virginia Power Industrial LF- Yorktown	TRO	17	0.44
461	Accomack Co. LF / Northern Site	TRO	89	2.07
469	Shenandoah Co. LF	VRO	71	2.63
471	Weaver Industrial Waste LF	PRO	22	0.88
493	Higgerson / Buchanan LF	TRO	41	0.89
498	Bristol Debris LF	SWRO	56	0.82
504	International Paper LF	TRO	9	0.24
506	623 CDD LF	PRO	5	0.20
507	Northampton Co. LF	TRO	91	1.98
508	Carroll - Grayson - Galax Regional LF	SWRO	51	1.09
513	Wise Co. LF	SWRO	128	1.88
514	Roanoke Cement Company LF	WCRO	10	0.30
516	Qualla Road LF	PRO	13	0.59
517	Lynchburg Foundry LF / Falwell	WCRO	16	0.57
520	Rappahannock Co. LF	NRO	28	0.97
522	Westaco Asbestos LF	WCRO	2	0.05
524	Simons Hauling Company Debris Landfill	PRO	30	1.67
525	Cox's Darbytown Road LF	PRO	7	0.26
527	Abex Corporation Industrial Landfill	VRO	2	0.15
529	Frederick County Sanitary Landfill	VRO	38	1.65
531	Charles City County Sanitary Landfill	PRO	12	0.27

Table 4 - Individual Facilities Alleged Violations
Non-Landfills (Transfer Stations, Energy Recovery Facilities, and Gas Extraction Systems)

Site Name	DEQ Region	Total Alleged Violations	Average Alleged Violations	
			Per Inspection	
185 VPI Pathological Incinerator	WCRO	16		0.44
297 Hampton/NASA Refuse-Fired Steam Generating Facility	TRO	1		0.03
387 I-66 Transfer Station	NRO	0		0.00
390 Harrisonburg Resource Recovery Facility	VRO	21		3.00
396 SPSA VA Beach Transfer Station #1	TRO	7		0.18
421 SPSA Ballentine Transfer Station	TRO	6		0.13
425 SPSA Chesapeake Transfer Station	TRO	2		0.04
435 Alexandria / Arlington RRF	NRO	7		0.35
438 SPSA Franklin Transfer Station	TRO	4		0.11
455 SPSA Refuse Derived Fuel Plant	TRO	1		0.02
482 SPSA NNS Recovery Facility	TRO	7		0.12
484 SPSA Boykins Transfer Station	TRO	1		0.03
494 SPSA Isle of Wight Transfer Station	TRO	0		0.00
510 I-95 Energy RRF	NRO	2		0.09
534 BFI Telegraph Road Gas Ext. System	NRO	0		0.00
871-I American Waste Industries	TRO	20		0.80

Table 5 – Facilities Permitted before December 21, 1988

No subsequent amendments after December 21, 1988

Permit Number	Facility Name
014	Mecklenburg Co. LF
021	Augusta Co. Service Authority LF
023	Scott Co. Sanitary Landfill
031	South Boston Sanitary LF
041	City of Portsmouth / Craney Island LF
049	City of Martinsville LF
072	Franklin Co. LF
074	Stafford Co. LF / R-Board LF
075	Rockbridge Co. LF / Buena Vista
185	VPI Pathological Incinerator
187	Waynesboro Nurseries LF
194	Louisa County LF
207	Hoechst-Celanese Fibers LF
227	Lunenburg County Landfill
235	Cox's Charles City Road LF
280	Holland Industrial LF
305	Thrasher CDD Landfill (Elbow Farms)
307	US Gypsum Company LF– Washington Co.
322	Waltrip LF
326	Hilltop Debris LF
327	Rainwater Concrete Debris LF
331	Lorton CDD LF
346	Georgia Pacific Corp. North - Jarratt
353	Radford Army Ammunition Plant Ash LF #2
363	Amoco LF / Yorktown Refinery
390	Harrisonburg Resource Recovery Facility
394	Westvaco Fly Ash LF #3
396	SPSA-VA Beach Transfer Station #1
413	Westvaco Fly Ash LF #1
414	Westvaco Fly Ash LF #2
421	SPSA-Ballentine Transfer Station
425	SPSA-Chesapeake Transfer Station
429	Fluvanna Co. LF
433	Radford Army Ammunition Plant Debris LF No. 2
436	Wolftrap Debris LF
438	SPSA-Franklin Transfer Station
445	Thomas Brothers Debris LF
457	Virginia Power Industrial Landfill- Yorktown
471	Weaver Industrial Waste LF
482	SPSA-NNS Recovery Facility
484	SPSA-Boykins Transfer Station
493	Higgerson / Buchanan LF
494	SPSA-Isle of Wight Transfer Station
506	623 CDD LF
507	Northampton Co. LF
510	I-95 Energy RRF
517	Lynchburg Foundry LF-Falwell
522	Westvaco Asbestos LF
534	BFI Telegraph Road Gas Ext. System
871-I	American Waste Industries

Appendix 1 - Compliance Review Checklists for Landfills

Sanitary Landfills, CDD Landfills and Industrial Landfills

NOTE: This appendix is available as a separate download from the Department's website.

Appendix 2 - Compliance Review Checklists for Non-Landfills

Transfer Stations, Energy Recovery Facilities, and Gas Extraction Systems

*NOTE: This appendix is available as a separate download from the
Department's website.*

Appendix 3 - Permit Review Checklists for Landfills

Sanitary Landfills, CDD Landfills and Industrial Landfills

NOTE: This appendix is available as a separate download from the Department's website.

Note: Facilities that lack current, facility specific permit modules remain subject to their existing permits, any approved plans, and the standards in the applicable regulations.

Appendix 4 - Permit Review Checklists for Non-Landfills

Transfer Stations, Energy Recovery Facilities, and Gas Extraction Systems

*NOTE: This appendix is available as a separate download from the
Department's website.*

Note: Facilities that lack current, facility specific permit modules remain subject to their existing permits, any approved plans, and the standards in the applicable regulations.